

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

- 1-37. (cancelled)
38. (original) A particle sprayer for disposing charged particles selectively on a substrate having a plurality of electrodes
which comprises a nozzle for spraying charged particles onto the substrate,
a conductive stage having a fixed position and serving to hold the substrate onto which charged particles are to be sprayed,
a plurality of push-up pins for mounting the substrate on and dismounting the substrate from the conductive stage,
a probe for applying a voltage identical in polarity with the charged particles to a plurality of electrodes on the substrate disposed on the conductive stage,
and a conductor is electrically insulated from the conductive stage,
said conductor being a conductive frame provided with an opening smaller in size than the substrate,
being disposed on the top of the substrate disposed on the conductive stage,
and being applied a voltage of the same polarity as the charged particle polarity thereto.
39. (original) The particle sprayer according to Claim 38, wherein the probe and the conductor move up or down in synchronization with each other.
40. (original) The particle sprayer according to Claim 38, wherein the probe and the conductor move up or down as an integrated body.
41. (currently amended) The particle sprayer according to Claim 38, ~~39, or 40,~~
wherein the probe, conductor and push-up pins are driven in synchronization by means of a single driving source.
42. (currently amended) The particle sprayer according to Claim 38, ~~39, 40, or 41,~~
wherein one and the same voltage is applied simultaneously to the plurality of electrodes and the conductor.

43. (currently amended) A liquid crystal display device obtainable by [the] a method of spraying particles according to Claim 1, 2, 3, 4, 5, 6, 7, 8, or 9 which comprises applying a voltage of the same polarity as the particle charge polarity to a plurality of electrodes formed on a substrate and spraying the particles while utilizing a repulsive force operating on the particles, wherein means is employed for preventing said particles from being turned out of the electrode domain comprising the plurality of electrodes.
44. (currently amended) A liquid crystal display device obtainable by [the] a method for producing a liquid crystal display device according to Claim 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 or 24 comprising spraying spacers onto at least one of a first substrate comprising at least pattern-forming transparent electrodes and having at least one display area and a second substrate to be disposed opposedly above the first substrate and filling a liquid crystal into the space between both the substrates, wherein, in providing accessory electrodes outside the display area and spraying positively or negatively charged spacers onto the substrate, two or more voltages differing in voltage value are applied to respective transparent electrodes and a voltage is applied to the accessory electrodes as well to thereby control the electric field generated above the transparent electrodes and above the accessory electrodes so as to cause selective spacer disposition only in a predetermined transparent electrode gap among the gaps between respective neighboring transparent electrodes.
45. (currently amended) A liquid crystal display device obtainable by [the] a method for producing a liquid crystal display device according to Claim 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 or 37 comprising spraying spacers onto at least one of a first substrate comprising at least pattern-forming transparent electrodes and a dummy electrode and a second substrate to be disposed opposedly above the first substrate and filling a liquid crystal into the space between both the substrates, wherein, in spraying positively or negatively charged spacers onto the substrate, the substrate is disposed in close contact with an earthed conductive stage, and a conductor is provided in a state electrically insulated from the conductive stage,

said conductor being a conductive frame having an opening,
said conductor frame being disposed on the periphery of the substrate with or
without partial overlapping with the substrate periphery,
and wherein a voltage is applied to the transparent electrodes and the conductive
frame,

using the particle sprayer according to Claim 38, 39, 40, 41, or 42.

46. (new) The particle sprayer according to Claim 39,
wherein the probe, conductor and push-up pins are driven in synchronization by
means of a single driving source.

47. (new) The particle sprayer according to Claim 40,
wherein the probe, conductor and push-up pins are driven in synchronization by
means of a single driving source.

48. (new) The particle sprayer according to Claim 39,
wherein one and the same voltage is applied simultaneously to the plurality of
electrodes and the conductor.

49. (new) The particle sprayer according to Claim 40,
wherein one and the same voltage is applied simultaneously to the plurality of
electrodes and the conductor.

50. (new) The particle sprayer according to Claim 41,
wherein one and the same voltage is applied simultaneously to the plurality of
electrodes and the conductor.

51. (new) The liquid crystal display device obtainable by the method according to
Claim 43 wherein,

the method comprises providing at least one dummy electrode outside the electrode
domain comprising the plurality of electrodes,

and applying, to said dummy electrode, a voltage of the same polarity as the particle
charge polarity to thereby control the electric field above the peripheral region of the
electrode domain comprising said plurality of electrodes..

52. (new) The liquid crystal display device obtainable by the method according to
Claim 43

wherein the voltage applied to the plurality of electrodes is 500 to 8,000 V.

53. (new) The liquid crystal display device obtainable by the method according to
Claim 43

wherein the electrode other than the plurality of electrodes is disposed in a region surrounding the periphery of the electrode domain other than an accessory electrode for voltage application to said plurality of electrodes.

54. (new) The liquid crystal display device obtainable by the method according to
Claim 43

wherein the area of the electrode other than the plurality of electrodes is larger than the area of any of said plurality of electrodes.

55. (new) The liquid crystal display device obtainable by the method according to
Claim 43

wherein the voltage applied to the electrode other than the plurality of electrodes is the same as that applied to said plurality of electrodes.

56. (new) The liquid crystal display device obtainable by the method according to
Claim 43

wherein the electrode other than the plurality of electrodes is a solid electrode provided in the periphery region of the substrate.

57. (new) The liquid crystal display device obtainable by the method according to
Claim 43

wherein the particles are sprayed by dry method.